INDEX

NEUROPHYSIOLOGY

Volume 6, Numbers 1-6, 1974

NEUROPHYSIOLOGY
Volume 6, Numbers 1-6, 1974
(A translation of Neirofiziologiya)

A

Airapetyan, A. A.—180
Akoev, G. N.—248, 339
Aleksandrov, A. A.—7
Aleksandrov, Yu. I.—437
Andrianov, Yu. N.—47
Artemenko, D. P.—358
Artem'eva, E. N.—506
Arushanyan, E. B.—191

B

Baev, K. V.—353
Batueva, I. V.—500
Belozertsev, Yu. A.—191
Belyaev, V. I.—163
Belyi, V. P.—323
Blaivas, A. S.—168
Bogomolets, V. I.—410
Bratus', N. V.—316
Breitburd, E. S.—332
Broun, G. R.—47
Bulygin, I. A.—138
Busel', B. I.—279
Bushmarina, T. A.—111, 233, 492

C

Chelyashev, Yu. A.—248
Chepurnov, S. A.—323, 395
Chepurnova, N. E.—395
Chudakov, L. I.—253

D

Datsishin, P. T.—316
Doronin, V. N.—133
D'yachkova, L. N.—27

E

Egorova, I. S.—309
El'kina, G. A.—302
El'man, S. I.—248
Ezrokhi, V. L.—156

F

Filaretov, A. A.—383
Frantsevich, L. I.—54, 60

G

Gokin, A. P.—104
Grechenko, T. N.—147, 152
Gusel'nikova, K. G.—461
Gutauskas, A. I.—241

I

Il'inskii, O. B.—47, 339
Il'yuchenok, R. Yu.—345
Ioseliani, T. K.—454
Isabekova, S. B.—97
Ivanov, A. Ya.—410, 518

K

Kalistatov, G. F.—363
Karamyshev, V. D.—19
Katalymov, L. L.—421
Kazakov, V. N.—214
Keder-Stepanova, I. A.—403
Khizanishvili, N. A.—454
Kipor, G. V.—461
Kipriyan, T. K.—203
Kleinbok, I. Ya.—133
Korobtsov, G. N.—512
Korogod, S. M.—33, 351
Korol'kova, T. A.—220, 296, 302
Kostyuk, P. G.—353, 440, 482
Kozhechkin, S. N.—197
Krasotkina, V. L.—395
Kudina, L. P.—119

L

Lebedev, V. P.—111, 233, 492
Limanskaya, L. I.—443
Litvinova, A. N.—467
Lukhanina, E. P.—467
Lukomskaya, N. Ya.—518

M

Magazanik, L. G.—518
Magura, I. S.—440
Maiskii, V. A.—285
Mamonets, T. M.—358
Mirgorodskii, S. I.—410
Misochko, I. V.—220
Mokrushov, P. A.—60
Motsnyi, M. P.—41
Musyashchikova, S. S.—127

N

Nanobashvili, Z. I.—454

P

Petryaevskaya, E. R.—403
Pilyavskii, A. I.—83
Pisareva, N. L.—389
Pogorelaya, N. Kh.—33
Pokrovskii, A. N.—348
Polishchuk, N. A.—415
Potapova, A. E.—41
Potekhina, I. L.—208
Preobrazhenskii, N. N.—104
Prokhina, E. A.—214
Prokhorenko, Yu. P.—348
Prokopenko, V. F.—368

R

Rabin, A. G.—376
Radchenko, A. N.—73
Rodionov, I. M.—253

S

Sakharov, D. A.—512
Savos'kina, L. A.—285
Serkov, F. N.—90, 175, 263, 521
Shaposhnikov, V. L.—429
Shapovalov, A. I.—500
Shapovalov, A. V.—104
Shelest, I. I.—449
Shik, M. L.—475
Shlykov, V. Yu.—13
Shugurov, O. A.—41
Shvikov, V. B.—437
Sinyaya, M. S.—127
Skibo, G. G.—482
Skobelev, V. A.—111, 233, 492
Skok, V. I.—332, 410
Smirnov, K. A.—208
Sokolov, E. N.—65, 147, 152
Soltanov, V. V.—138
Storozhuk, V. M.—443

Sverdlov, Yu. S.—80

T

Tairov, O. P.—7
Tal'nov, A. N.—90, 263
Tarusina, V. N.—33
Titkov, E. S.—339
Tleulin, S. Zh.—133
Tornuev, Yu. V.—348
Trush, V. D.—220, 296, 302
Tultaeva, T. S.—65

U

Uryvaev, Yu. V.—363

V

Vartanyan I. A.—184, 272
Vasilevskaya, N. E.—227
Velumyan, A. A.—253
Venslauskas, M. I.—241
Voloshin, M. Ya.—368, 521

Y

Yagodnitsyn, A. S.—475
Yanovskii, E. Sh.—90, 263

Z

Zalkin'd, M. S.—13
Zerikin, G. M.—415
Zhadan, P. M.—339
Zharova, L. T.—227
Zhuravi n, I. A.—1

NEUROPHYSIOLOGY
Volume 6, Numbers 1-6, 1974
(A translation of Neirofiziologiya)

Volume 6, Number 1 January-February, 1974

	Engl.	Russ.
Spontaneous Unit Activity of the Monkey Caudate Nucleus under Chronic Experimental Conditions — I. A. Zhuravin	1	3
Unit Activity in the Posterior Sigmoid and Proreal Gyri of the Cat Cortex during Bemegride Administration — O. P. Tairov and A. A. Aleksandrov	7	11
The Response of Generalized Motor Activation in Man — M. S. Zalkind and V. Yu. Shlykov	13	19
Effect of Repeated Daily Electrical Stimulation on Seizure Activity in the Rabbit Limbic System — V. D. Karamyshev	19	26
Axo-Axonal Synapses in the Frog Tectum Opticum — Yu. B. Manteifel' and L. N. D'yachkova	27	37
Experimental Morphological Study of Endings of Propriospinal Fibers of the Lateral Funiculus in the Cat Cervical Spinal Cord — N. Kh. Pogorelaya and V. N. Tarusina	33	44
A Possible Coordinating Role for Presynaptic Inhibition — S. M. Korogod, M. P. Motsnyi, A. E. Potapova, and O. A. Shugurov	41	52
Electrophysiological Investigation of Central Neurons of the Electroreceptor System of the Skate — Yu. N. Andrianov, G. R. Broun, and O. B. Il'inskii	47	59
Responses of High-Frequency Movement Detector Neurons in Dragonfly Larvae to Motion of Single Objects — L. I. Frantsevich and P. A. Mokrushov	54	68
Responses of High-Frequency Movement Detector Neurons in Dragonfly Larvae to Motion of Complex Patterns — L. I. Frantsevich and P. A. Mokrushov	60	75
Disturbance of Action Potential Generation in the Mollusk Giant Neuron after Preliminary Membrane Hyperpolarization — E. N. Sokolov and T. S. Tultaeva	65	81
Physical Simulation of Neuronal Memory as a Mosaic of Chemoreceptor and Electroreceptor Elements of the Somato-Dendritic Membrane — A. N. Radchenko	73	90
BRIEF COMMUNICATIONS		
Repeated Discharges of Motoneurons Evoked by a Depolarizing Current in Cats with Experimental Tetanus — Yu. S. Sverdlov	80	99
Analysis of Monosynaptic Cortico-Reticular Connections — A. I. Pilyavskii	83	103

Volume 6, Number 2 March-April, 1974

The 250th Anniversary of Foundation of the Academy of Sciences of the USSR	87	115
Characteristics of Cortical Inhibitory Neurons — F. N. Serkov, E. Sh. Yanovskii, and A. N. Tal'nov	90	119
Electrophysiological Analysis of Cortico-Tectal Connections in the Turtle — S. B. Isabekova	97	127
Investigation of the Functional Characteristics of Reticulo-Spinal Fibers of the Ventral Funiculus — A. P. Gokin, N. N. Preobrazhenskii, and A. V. Shapovalov	104	135

Properties of Axons of Sympathetic Preganglionic Neurons in the Cat Lumbar Spinal Cord — V. P. Lebedev, V. A. Skobelev, and T. A. Bushmarina 111 143
Double Discharges in Human Motoneurons — L. P. Kudina 119 152
Activation of the Nuclei of Goll and Burdach in the Medulla Oblongata by Visceral Afferent Systems — S. S. Musyashchikova and M. S. Sinyaya..... 127 161
Responses of Spontaneously Active Spinal Neurons to Temperature Stimulation of the Skin — S. Zh. Tleulin, V. N. Doronin, and I. Ya. Kleinbok..... 133 168
Location of Bodies of Peripheral (Sympathetic) Afferent Neurons Participating in Peripheral Reflexes of the Small Intestine — I. A. Bulygin and V. V. Soltanov... 138 175
Stepwise Action Potentials of the Soma Membrane of Molluscan Neurons — E. N. Sokolov and T. N. Grechenko 147 186
Reversible Depression of Postsynaptic Responses of Molluscan Neurons after Strong Direct Hyperpolarizing Stimulation — E. N. Sokolov and T. N. Grechenko..... 152 192
Postinhibitory Unit Response of Crustacean Stretch Receptors after Direct and Recurrent Inhibition — V. L. Ézrokhi 156 197
Effect of Changes in pH of the Medium on Electrical Activity of the Ranvier Node — V. I. Belyaev 163 205
Visual Analysis in Unspecialized Receptive Fields as an Orthogonal Series Expansion — A. S. Blaivas 168 211

Volume 6, Number 3 May-June, 1974

On the 250th Anniversary of Foundation of the Academy of Sciences of the USSR. The Development of Physiology in the St. Petersburg Academy of Sciences in the XVIII and XIX Centuries — F. N. Serkov 175 227
Role of the Physiological Institutions of the Academy of Sciences of the USSR in the Development of Neurophysiology in Armenia — A. A. Airapetyan 180 233
Responses of Central Auditory Neurons to Frequency-Modulated Stimuli — I. A. Vartanyan 184 237
Effect of Psychostimulants on Responses of Anterior Neocortical Neurons to Afferent and Subcortical Stimuli — É. B. Arushanyan and Yu. A. Belozertsev 191 246
Microiontophoretic Study of the Effect of Biogenic Amines on Unit Activity in the Rabbit Visual Cortex — S. N. Kozhechkin 197 253
Effects of Hydrocortisone on Electrical Activity of the Cat Spinal Cord — T. K. Kipriyan . 203 260
Localization and Properties of Reticulospinal Neurons with Axons Descending in the Dorsolateral Parts of the Lateral Funiculi — K. A. Smirnov and I. L. Potekhina.. 208 266
Electrophysiological Analysis of Corticofugal Connections with the Medial Dorsal Thalamic Nucleus — V. N. Kazakov and E. A. Prokhina 214 273
Analysis of the Theta-Rhythm of the Rabbit Neocortex by Estimation of Particular Coherence Functions — V. D. Trush, I. V. Misochko, and T. A. Korol'kova 220 280
Evoked Potentials in the Frog Medulla to Electrical Stimulation of the Glossopharyngeal Nerve — N. E. Vasilevskaya and L. T. Zharova 227 288
A Study of Single Sympathetic Preganglionic Neurons in the Lateral Horns of the Lumbar Spinal Cord — V. P. Lebedev, V. A. Skobelev, and T. A. Bushmarina ... 233 295
Characteristics of Electrotonic Spread Along the Dendritic Tree of Retinal Ganglion Cells — M. I. Venslauskas and A. I. Gutauskas 241 304
Effect of Catecholamines on Excitability of Single Mechanoreceptors of Pacinian Corpuscles — G. N. Akoev, Yu. A. Chelyashev, and S. I. Él'man 248 312
Investigation of the Frequency Distribution of Natural Activity in a Mixed Nerve Trunk by the Colliding Impulse Method — A. A. Velumyan, I. M. Rodionov, and L. I. Chudakov 253 318

OBITUARY
Petr Kuz'mich Anokhin 261 328

Volume 6, Number 4 July-August, 1974

Effect of Pentobarbital, Chloralose, and Urethane on Inhibitory Postsynaptic Potentials of Cortical Neurons — F. N. Serkov, E. Sh. Yanovskii, and A. N. Tal'nov 263 339

Dependence of Responses of Central Auditory Neurons on the Depth and Rate of Frequency Modulation — I. A. Vartanyan 272 350

Somatosensory Cortical Unit Responses in the Waking Cat to Afferent Stimuli — B. I. Busel' 279 359

Distribution and Ultrastructure of Pyramidal Tract Endings in the Cat Rhombencephalon — V. A. Maiskii and L. A. Savos'kina 285 367

An Investigation of Phase Relations between Theta-Rhythm Potentials in the Neocortex and Hippocampus of Rabbits — V. D. Trush and T. A. Korol'kova 296 376

Analysis of Theta-Rhythms Recorded in an Isolated Strip of Rabbit Sensomotor Cortex — T. A. Korol'kova, V. D. Trush, and G. A. Él'kina 302 383

Structural and Functional Features of Caudatocortical Connections — I. S. Egorova 309 391

Interaction between Unit Responses of the Cat Cerebellar Cortex during Paired Stimulation of the Forelimbs — N. V. Bratus' and P. T. Datsishin 316 399

Microelectrophoretic Study of Unit Responses of the Rabbit Amygdaloid Nucleus to Acetylcholine and Noradrenalin — S. A. Chepurnov and V. P. Belyi 323 407

Neuronal Organization of the Left Celiac Ganglion in the Cat — A. V. Syromyatnikov, V. I. Skok, and E. S. Breitburd 332 418

Electrophysiological Investigation of the Properties of the Electroreceptors (Ampullae of Lorenzini) in Black Sea Rays — G. N. Akoev, P. M. Zhadan, O. B. Il'inskii, and E. S. Titkov 339 426

BRIEF COMMUNICATIONS

Septo-Hippocampal Evoked Responses to Microiontophoretic Injection of Sodium Glutamate and Atropine — R. Yu. Il'yuchenok, N. I. Dubrovina, and M. A. Gilinskii 345 434

Genesis of the Early Positive Component of the Primary Response — A. N. Pokrovskii, Yu. P. Prokhorenko, and Yu. V. Tornuev 348 437

Presynaptic Inhibition Evoked by Stimulation of Relatively High-Threshold Cutaneous Afferents — S. M. Korogod 351 441

Volume 6, Number 5 September-October, 1974

Pyramidal Unit Activity in Unanesthetized Cats — K. V. Baev and P. G. Kostyuk..... 353 451

Unit Responses in Area 5b of the Suprasylvian Gyrus to Stimulation of the Ventral Posterolateral Thalamic Nucleus — D. P. Artemenko and T. M. Mamonets 358 458

Some Mechanisms of Frontal Cortical Participation in Afferent Integration — G. F. Kalistratov and Yu. V. Uryvaev 363 465

Unit Responses of the Reticular and Ventral Anterior Thalamic Nuclei of Cats to Orbitofrontal Cortical Stimulation — M. Ya. Voloshin and V. F. Prokopenko 368 472

The Second Somatosensory Region of the Cat Thalamus — A. G. Rabin 376 481

Hypothalamic Unit Responses to Impulses from the Hippocampus and Mesencephalic Reticular Formation — A. A. Filaretov..... 383 489

Effect of Visual Deprivation on Evoked Potentials in the Visual Cortex and Superior Colliculus in Rabbits — N. L. Pisareva..... 389 496

The Action of Sodium Glutamate and Acetylcholine on Neurons of the Basal Amygdaloid Nucleus after Degeneration of Hypothalamo-Amygdaloid Pathways — S. A. Chepurnov, N. E. Chepurnova, and V. L. Krasotkina 395 503

Localization and Structural Characteristics of the Cat Phrenic Nucleus — I. A. Keder-Stepanova and V. B. Petryaevskaya 403 513

Electrical Activity of the Sympathetic Ganglia during the Depressor Reflex — V. I. Skok, V. I. Bogomolets, A. Ya. Ivanov, and V. N. Mirgorodskii 410 519

	Engl.	Russ.
Inhibitory Systems Sensitive to Catecholamines and GABA in the Inner Plexiform Layer of the Frog Retina — N. A. Polishchuk and G. M. Zenkin	415	525
After-Depolarization of the Frog Nerve and Single Nerve Fiber — L. L. Katalymov	421	532
Some Physiological Characteristics of Myelinated and Unmyelinated Fibers with Very Low Conduction Velocity — V. L. Shaposhnikov	429	542
BRIEF COMMUNICATIONS		
Latent Periods and Synchronization of Unit Discharge of the Visual and Somatosensory Cortex in Response to Conditioning Flashes — Yu. I. Aleksandrov and V. B. Shvirkov	437	551
BOOK REVIEWS		
V. V. Zakusov. The Pharmacology of Central Synapses — Reviewed by P. G. Kostyuk and I. S. Magura	440	554

Volume 6, Number 6 November-December, 1974

Functional Organization of Afferent Inputs of Neurons of the Cat Somatic Cortex — V. M. Storozhuk and L. I. Limanskaya	443	563
Unit Responses of the Second Auditory Area to Acoustic Stimulation — I. I. Shelest	449	571
Changes in Seizure Activity Thresholds of the Cat Brain in Various Stages of Sleep and Wakefulness — T. K. Ioseliani, Z. I. Nanobashvili, and N. A. Khizanishvili	454	577
Inhibition in the Olfactory Bulb of the Lizard — K. G. Gusel'nikova and G. V. Kipor	461	585
Investigation of Pallidofugal Influences on Hypothalamic Activity — E. P. Lukhanina and A. N. Litvinova	467	592
Anisotropic Connections in the Cat Midbrain Tegmentum — A.S. Yagodnitsyn and M. L. Shik	475	602
Synaptic Connections of Fibers of the Rubrospinal Tract in the Cat Spinal Cord P. G. Kostyuk and G. G. Skibo	482	610
Monosynaptic Reflex Responses in Lumbar White Rami to Stimulation of Segmental Somatic Nerves — V. P. Lebedev, V. A. Skobelev, and T. A. Bushmarina	492	619
Synaptic Effects Evoked by Supraspinal and Intraspinal Stimulation in Lamprey Motoneurons — I. V. Batueva and A. I. Shapovalov	500	629
Effect of the Tendon Reflex on the Silent Period of Motor Units in Man — E. N. Artem'eva	506	636
Effect of Serotonin and Acetylcholine on Neurons in the Central Nervous System of Snails — G. N. Korobtsov and D. A. Sakharov	512	644
BRIEF COMMUNICATIONS		
Action of Snake Venom Polypeptides on Cholinergic Receptors of the Isolated Rabbit Sympathetic Ganglion — L. G. Magazanik, A. Ya. Ivanov, and N. Ya. Lukomskaya	518	652
BOOK REVIEWS		
J. Bureš, O. Burešova, and J. Křivanek. The Mechanism and Applications of Leao's Spreading Depression of Electroencephalographic Activity — Reviewed by F. N. Serkov and M. Ya. Voloshin	521	655
INDEX		
Author Index, Volume 6, Numbers 1-6, 1974	525	
Tables of Contents, Volume 6, Numbers 1-6, 1974	527	